# DEFINITIONS OF COMPONENTS OF THE WATER DATA SOURCES DIRECTORY MAINTAINED BY THE NATIONAL WATER DATA EXCHANGE

By Melvin D. Edwards



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#### PREFACE

The National Water Data Exchange (NAWDEX) is an interagency program to facilitate the exchange of water data and to promote the standardization of water-data-handling procedures. Participants in the NAWDEX program consist of Federal, State, and local governmental organizations, and private organizations that collect and use water data.

NAWDEX maintains a "Water Data Sources Directory" which is a computerized index of water resources organizations. The Directory provides answers to: What kinds of water data are available? Who has the data? Where can the data be obtained?

This document defines the data components contained in the Water Data Sources Directory (WDSD); it is referred to as the "dictionary." Its purpose is to describe, in detail, the information in the WDSD.

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# DEFINITIONS OF COMPONENTS OF THE WATER DATA SOURCES DIRECTORY MAINTAINED BY THE NATIONAL WATER DATA EXCHANGE

By

#### Melvin D. Edwards

#### INTRODUCTION

The Water Data Sources Directory (WDSD) is a computerized data base developed and maintained by the National Water Data Exchange (NAWDEX) Program Office which contains information about organizations that collect, store, and disseminate water data and water-related data. This includes: The type of each organization; the major orientation of water-data activities conducted by each organization; the names, addresses, and telephone numbers of offices within each organization from which water data may be obtained; the types of data held by each organization and the geographic locations within which these data have been collected; alternate sources of an organization's data; the designation of liaison personnel in matters related to water-data acquisition and indexing; the volume of water data indexed for the organization; and information about other types of data and services available from the organization that are pertinent to water-resource activities. This document contains a definition and description of each component of the WDSD data base. For simplicity, it is referred to as a data "dictionary." It is intended, primarily, to assist those persons using the WDSD in understanding and clarifying information obtained from the data base.

The WDSD is designed to be used independently, or in conjuction with, the Master Water Data Index (MWDI). The MWDI is also a computerized data base developed and maintained by the NAWDEX Program Office. It contains detailed information about sites at which water data are collected: Identification and location of a site; the type of site; the organization operating the site; the current status of data collection at the site; the period of record available surface-water site; the major or ground-water parameters, water-quality parameters, and meteorological parameters measured at the site and the frequency of measurement of these parameters; and the media in which data are available for the site. A few components are common in both data bases, thereby allowing retrieved information to be cross-referenced between For example: A retrieval may be made from the MWDI to identify all sites within a geographic area of interest for which water quality data are available. A retrieval can, then, be made from the WDSD to determine the addresses from which the data may be obtained from organizations operating the identified sites. The hierarchical structure and content of the MWDI are shown in figure 1, page 123. A complete description of the MWDI can be found in the publication entitled "Definitions of Components of the Master Water Data Index Maintained by the National Water Data Exchange."

#### OVERVIEW OF THE WATER DATA SOURCES DIRECTORY

#### Data Base Description

The Water Data Sources Directory (WDSD) contains the following general categories of information:

Organization Description

Unique identifier

Name of organization

NAWDEX membership

Type of organization

Orientation of the organization's activities

## Office Description

Unique identifier

Name of office

Address

Telephone number

Areal coverage of data

Media used for data storage

State(s) and counties having data

General comments

Local Assistance Center information

#### Data Holdings of the Organization

Country, State, and counties for which data are available

Types of data available

Alternate Sources of the Organization's Data

Name of the alternate source

Address

Types of data available

Media used for data storage

General comments

Information about Liaison Officials for Water-Data Acquisition and Indexing Activities

Data Indexed in the MWDI

Water-Related Data Holdings of the Organization

Types of data available

Period of record

Number of sites or observations

Geographic area covered

Frequency of measurement

Media used for data storage

Other organizations that are sources of the data

As the NAWDEX program progresses, additional categories of data, or additional data items, will be added to the WDSD. Future editions of this dictionary will reflect any additions or changes to the WDSD.

#### Data Base Structure

The WDSD data base is managed and maintained by the SYSTEM 2000 decomposed into a hierarchical structure, as shown in figure 2, page 125. All of the data about a single organization comprises a logical entry in the data base. Each organization, therefore, is a single separate logical entry in the WDSD. Individual pieces of information, such as the name of an organization or the address of an office, are known as data components; logically related data elements are grouped into blocks called schema records. A logical entry, therefore, may be composed of one or more schema records, each of which consists of one or more data components.

A fundamental aspect of a schema record is that the data it describes can occur once, many times, or not at all. For example, office information is stored in the OFFICE schema record. Because an organization may have many offices, the OFFICE schema record may occur many times, once for each office of the organization. Conversely, if there are no alternate sources of an organization s data, there will be no occurence of the OTHER SOURCE schema record for the organization.

All components of a SYSTEM 2000 data base have a unique name and number (unique within the data base). Figure 2 illustrates the number and name of every component and schema record in the WDSD. An asterisk separates each number from its corresponding name. Data components are organized by their respective schema records, and each box in figure 2 represents a schema record, with its number and name at the top of the box.

#### HOW TO USE THIS DOCUMENT

This document contains a detailed explanation of each schema record and data component of the WDSD. It is organized in the same order as the WDSD data base, with descriptions of data components belonging to the same schema record being located together. Each page in this document describes one schema record or data component. A user searching for the description of a particular data component should use figure 2 to determine its schema record, then find the page number of that schema record in the table of contents. The description of the data component follows the description of the schema record.

At the top of each page, certain attributes of the data component defined are listed to provide information generally needed only by data processing personnel for software development. These include IN SR, DATA TYPE, PICTURE, and LARGEST VALUE. A full definition of each of these attributes is found below. For the majority of users it will only be necessary to consider these attributes when producing a report or formulating a complex retrieval using

SYSTEM 2000 is a registered trademark of Intel Corp., and its mention does not constitute endorsement by the U.S. Geological Survey.

the SYSTEM 2000 Immediate Access retrieval language. In other words, the majority of users need not be concerned with these attributes.

The attributes with which all users should be concerned are COMPONENT NAME, COMPONENT NUMBER, and KEY. COMPONENT NAME and COMPONENT NUMBER are simply labels for the component and may be used interchangeably by the user whenever referring to a component. The KEY attribute is an indicator of the relative expense and response time the user can expect when formulating a retrieval using the component in a conditional selection clause. For most cases, using key components (KEY=Yes) instead of non-key components (KEY=No), in specifying the selection criteria for a data base retrieval will result in faster response and lower expense. Additional information on the use of attributes may be obtained from the SYSTEM 2000 Reference Manual.

Figure 3 illustrates the format used to describe WDSD components. Following is an explanation of each part of the description.

- IN SR A number appears here, which is the number of the schema record (SR) to which the schema record or data component belongs. For example, the top level schema record, as shown in figure 2, is schema record 0. Data components 1 through 9 belong to schema record 0, as do schema records 100, 400, 500, 1000, 1500, and 1600. All data components that belong to the same schema record appear together in this document.
- COMPONENT NAME The unique name of the schema record or data component as used in the data base.
- COMPONENT NUMBER The unique number of the schema record or data component as used in the data base.
- MANDATORY Marked either "Yes" or "No." If "Yes", a value for the data component must be present in every occurrence of the schema record. For example, data component 1, NAWDEX AGCY, is mandatory because it is the unique identification code of the organization and, therefore, must always be present. On the other hand, data component 403, SW QLTY, is not mandatory because not every organization operates surface water quality sites and, therefore, the data component may be null (non-valued).
- KEY Marked either "Yes" or "No." In SYSTEM 2000, certain data components are designated by the designer of the data base as KEY to provide efficiencies in data retrieval. However, any data component, whether KEY or not, can be retrieved from the WDSD. This designation is not used for schema records.
- DATA TYPE Contains either CHAR, TEXT, INTEGER, DECIMAL, or DATE, depending on what type of data are stored for the component. CHAR and TEXT are used to store alphanumeric data (any character recognized by the computer), the difference being that TEXT retains leading and trailing blanks and multiple blanks between words, and CHAR does not. INTEGER and DECIMAL store whole numbers and decimal numbers, respectively, and DATE stores dates in the MM/DD/YYYYY format. This notation is not applicable to schema records.

#### NAWDEX

# WATER DATA SOURCES DIRECTORY

# DATA DICTIONARY

IN SR	COMPONENT NAME		COMPONENT	NUMBER
MANDATORY	KE Y	DATA	ТҮРЕ	
PICTURE	LARGEST OR LONGEST VALUE_			····
Data Values				
General Description				

Figure 3.—Format of a component description.

- PICTURE Describes the "storage capacity" of the data component, using X(n) or 9(n) notation. Data components that are CHAR and TEXT have PICTURE lengths of X(n), where "n" is the total number of characters. For example, X(23) indicates that typically up to 23 characters are stored for the data component. X indicates that only one character may be stored for the data component. INTEGER uses 9(n) to indicate the total number of digits that can be stored. For DECIMAL data components, 9(n).9(n) indicates places to the left and right of the decimal point. DATE is always MM/DD/YYYY, where MM equals month, DD equals day, and YYYY equals year, and, therefore, PICTURE designation is unnecessary. Schema records do not have a PICTURE designation.
- LARGEST OR LONGEST VALUE This is the largest value that is allowed for the data component. For example, the largest value of a component designated as PICTURE 9(4) may be 5075 because of editing standards placed on data input to the data base. For data components defined as CHAR or TEXT, the largest value is allowed to exceed the PICTURE size because of the SYSTEM 2000 "overflow" capability. An example of this is data component 2, ORG NAME, which is PICTURE X(23) but which may contain names up to 40 characters long.
- DATA VALUES This is a narrative definition of the values that can be stored for a data component.
- GENERAL DESCRIPTION This is a narrative description of the type of data stored for a data component, its purpose, and the source or usefulness of the data. If a coding scheme is used, the meaning of each code is explained.

#### ACKNOWLEDGMENT

This document is a revision of a prior document with the same title. Acknowledgment is given to Mr. William A. Knecht of CACI, Inc., who coauthored the original document.

WATER DATA SOURCES DIRECTORY COMPONENT DEFINITIONS

N/A	ORGANIZATION	0
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_N/A_	KEYN/A	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST VALUE	n/A

<u>Data Values</u> - Information that identifies and describes the water-related activities of the organization.

This schema record is the highest level of the hierarchical structure and, therefore, represents the logical entry of a single organization into the data base.

O IN SR	NAWDEX_AGCY COMPONENT NAME	1 COMPONENT NUMBER
MANDATORY Yes	KEY Yes	DATA TYPE Char
PICTURE X(5)	LARGEST OR LONGEST VALUE	5 characters

Data Values - The NAWDEX agency code varies in length from three to five For Federal organizations, it is US followed by a two- or characters. Values for abbreviation of the organization's name. three-character non-Federal organizations whose activities are within a given State boundary have a two-character alphabetic State code followed by a NAWDEX-assigned sequence number. Values for non-Federal organizations having activities at the multistate or national level have a three- to five-character abbreviation of the organization name (the characters US will not appear in the first two character positions). Alphabetic State codes are contained in the Federal Information Processing Standards (FIPS) Publication 5-1, dated June 15, 1970, and entitled "States and Outlying Areas of the United States." NAWDEX agency codes are presented in the publication entitled "Identification Codes for Organizations Listed in Computerized Data Systems of the U.S. Geological Survey" which may be obtained from the National Water Data Exchange, U.S. Geological Survey, 421 National Center, Reston, Virginia 22092. Telephone: (703) 860-6031; FTS 928-6031.

General Description - The NAWDEX agency code is assigned by the NAWDEX Program Office and is the unique identifier for participating Federal and non-Federal organizations that actively collect and store water data. Non-Federal organizations include State, county, and municipal agencies, as well as intergovernmental compacts, private organizations, universities, and any local organizations at other than county or municipal level.

0	ORG_NAME	2
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X(23)	LARGEST OR LONGEST VALUE	40 characters

Data Values - The name of the organization may contain up to 40 characters.

General Description - The name is the official name of the organization as it should appear on correspondence addressed to the organization.

0	NAWDEX_MBR	3
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X	LARGEST OR LONGEST VALUE	Y or N

 $\underline{\text{Data Values}}$  - This component is valued with "N" if the organization is not a member of NAWDEX, or with "Y" if it is a member.

General Description - Membership in NAWDEX is voluntary and open to any water-oriented organization that wishes to take an active role in its activities. To be a member, a signed Memorandum of Understanding is required between the NAWDEX Program Office and the member organization. For those organizations that have become members, this component is valued "Y." For all other organizations it is valued "N."

0		TYPE	4
IN SR		COMPONENT NAME	COMPONENT NUMBER
MANDATORY	Yes	KEY No	DATA TYPE Char
PICTURE	X	LARGEST OR LONGEST VALU	One-letter NAWDEX TYPE Code

Data Values - The TYPE component contains a one-character alphabetic code used to classify an organization into one of the categories explained below.

# General Description:

Code		Meaning
С	County -	A single organization, typically governmental, whose scope of activity is encompassed by the boundaries of one or more counties but does not cover an entire State.
F	Federal -	An agency or agencies of the Federal government or a multi-country organization operating at the Federal level.
G	Intergovern	mental - An organization made up of different govern- ment agencies, such as Federal-State compacts, State-State compacts, multicounty compacts, river basin commissions, etc. The scope of all the agencies involved is only within the United States.
I	Internation	al - An organization made up of representatives from different countries, such as UNESCO, WHO, etc.
L	Local -	A local governmental organization other than county or municipal.
M	Municipal -	A single municipal governmental organization.
P	Private -	An organization that cannot be classified as a governmental organization.
S	State -	A single governmental organization whose scope of activity is encompassed by the boundaries of a single State.

0		TYPE (continued)	4
IN SR		COMPONENT NAME	COMPONENT NUMBER
MANDATO	RY <u>Yes</u>	KEY_No	DATA TYPE Char
PICTURE	<u> </u>	LARGEST OR LONGEST VALUE	One-letter NAWDEX TYPE code
Code		Meaning	
Ū	University	or Research Institute - An educationa or private) at the university or col profit organization engaged in resea	lege level, or a non-
0	Other -	An organization that cannot be class other categories. If this component (the alphabetic character 0 and no number 5, OTHR TYPE, contains a descof organization.	is valued as "0" t zero) then component

0	OTHR_TYPE	5
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X(4)	LARGEST OR LONGEST VALUE	12 characters

Data Values - If the organization is a type that cannot be classified into one of the categories in component number 4, TYPE, then this component contains a description of the type of organization up to 12 characters in length. It is valued only if component number 4 is valued as "0" (Other).

General Description - Descriptions of "other" types of organizations are entered by the NAWDEX Program Office based on information supplied by the organizations.

0	ORIENTATIONI	6
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_Yes_	KEY_Yes	DATA TYPE Char
PICTURE X	LARGEST OR LONGEST VALUE	One-character NAWDEX orientation code

<u>Data Values</u> - This component contains a one-character alphabetic code that describes the primary orientation of the organization's water-related activities.

## General Description:

A Agriculture and Irrigation B Basic Hydrologic Research D Domestic, Rural E Evaluation of Resources F Flood Control H Hydroelectric I Industry M Multiple Source Public Supply N Navigation P Pollution Studies
D Domestic, Rural E Evaluation of Resources F Flood Control H Hydroelectric I Industry M Multiple Source Public Supply N Navigation
E Evaluation of Resources F Flood Control H Hydroelectric I Industry M Multiple Source Public Supply N Navigation
F Flood Control H Hydroelectric I Industry M Multiple Source Public Supply N Navigation
H Hydroelectric I Industry M Multiple Source Public Supply N Navigation
I Industry  M Multiple Source Public Supply  N Navigation
M Multiple Source Public Supply N Navigation
N Navigation
N Navigation
P Pollution Studies
R Recreation
S Single Source Public Supply
T Thermoelectric
W Fish and Wildlife
O Other

If this component is valued as "0" (the alphabetic character 0 and not zero) then component number 8, OTHR ORNTN, contains a description of the orientation of the organization's water-related activities.

0	ORIENTATION2	7
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY <u>Yes</u>	DATA TYPE Char
PICTURE X	LARGEST OR LONGEST VALUE	One-character NAWDEX orientation code

Data Values - This component contains a one-character alphabetic code that describes the secondary orientation of the organization's water-related activities, in the event that a single designation (in component 6, ORIENTATION1) is inadequate to describe those activities.

General Description - The same alphabetic codes used for ORIENTATION1 (component number 6) are used for ORIENTATION2.

U	OTHR_DRNTN	8
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X	LARGEST OR LONGEST VALUE	12 characters

Data Values - This component contains up to a 12-character description of the orientation of the organization's water-related activities. It is valued only if either component number 6 or component number 7 is valued as "0" (Other).

General Description - Descriptions of "other" types of orientations are entered by the NAWDEX Program Office based on information supplied by the reporting organization.

0	LAST_UPDATE	9
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_Yes_	KEY No	DATA TYPE Date
PICTURE MMDDYYYY	LARGEST OR LONGEST VALUE	Current date

Data Values - Contains the month, day, and year of the last date (MM/DD/YYYY) that an update of any type was processed against the organization's entry in the data base.

General Description - An update is defined as any transaction that adds, deletes, or changes data values in the WDSD data base. If no updates have been made to the data about an organization, the LAST UPDATE is the date on which the data was first inserted into the data base.

0	DIRECTORY_TYPE		10
IN SR	COMPONENT NAME		COMPONENT NUMBER
MANDATORY Yes	KEY <u>Yes</u>	DATA TYPE	Char
PICTURE X(10)	LARGEST OR LONGEST	VALUE 10	characters

## Data Values

- W Water Data Sources Directory
- R Water-Related Data Sources Directory
- 01 Directory of Water Resources Organizations
- L Directory of Liaison Officials
- I Directory of Indexing Officials
- N Directory of Water-Use Liaison Officials

General Description - DIRECTORY TYPE contains a combination of 1 to 10 codes, left-justified, to be used in retrieving specified types of directories. Each code may occur only once in this component. Additional codes will be added by the NAWDEX Program Office, as the need arises, to meet future directory needs.

The alphabetic character 0, not zero, as assigned.

0		OFFICE	100
IN SR		COMPONENT NAME	COMPONENT NUMBER
MANDATORY	N/A	KEY_N/A_	DATA TYPE SR
PICTURE	n /A	LARGEST OR LONGEST VALUE	n /a

Data Values - Information about one or more offices of the organization, including the office's address and telephone number and the areal coverage of the data possessed by the office.

The primary purpose of this schema record is to provide information to NAWDEX users about offices that can and will supply their data upon request.

100	OFC_CODE	102
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY Yes	DATA TYPE Char
PICTURE X(9)	LARGEST OR LONGEST VALUE	9 characters

Data Values - The Office Code is assigned by the NAWDEX Program Office and consists of a 9-character code. The first two characters of the code consists of a two-digit numeric code representing the state or a two-character code representing the country in which the office is located; the next five characters consist of a five-digit numeric code representing the city or place in which the office is located; and the last two characters consist of an arbitrary two-digit sequence number to identify, uniquely, multiple offices within the same city or place. A complete list of country codes is contained in the Federal Information Processing Standards (FIPS) Publication 10-2, dated 1976, entitled "Countries, Dependencies, and Areas of Special Sovereignty"; a complete list of State codes is contained in the Federal Information Processing Standards (FIPS) Publication 5-1, dated 1970, entitled "States and Outlying Areas of the United States"; and a complete list of city and place codes is contained in the Federal Information Processing Standards (FIPS) Publication 55, dated 1978, entitled "Codes for Named Populated Places and Related Entities of the State of the United States."

General Definition - The Office code is assigned by the NAWDEX Program Office and is used to retrieve addresses of operating offices from the Water Data Sources Directory data base. The code for an office is unique within an organization but is not necessarily unique across the data base. Its counterpart in the Master Water Data Index data base is component number 17, WDSD OFC CODE.

100	OFC_NAME	110
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X(15)	LARGEST OR LONGEST VALUE	40 characters

Data Values - The name of the office may contain up to 40 characters.

General Description - This is the official name of the office. If the organization has but a single office, this field may be identical to component 2, ORG NAME.

100	OFC_CONTACT	111
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY_No	DATA TYPE Char
PICTURE X(15)	LARGEST OR LONGEST VALUE	40 characters

Data Values - This component may contain up to 40 characters.

General Description - The office contact is the name, or title, of the person, or office, that should be contacted by a requester for the purpose of obtaining the office's data that are indexed in NAWDEX.

100	OFC_ST /POB	112
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X(15)	LARGEST OR LONGEST VALUE	40 characters

Data Values - This component may contain up to 40 characters.

General Description - This is the street address, or post office box number, of the office contact named in component 111, OFC\_CONTACT. This is the address to which a requester should send a letter requesting the office's data indexed in NAWDEX.

100	OFC_CITY	113
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X(10)	LARGEST OR LONGEST VALUE	30 characters

Data Values - The name of the city, not to exceed 30 characters.

General Description - The city in which the office is located. The city name accompanies the address (component 112) and, therefore, should be the name of the city as it is used for mailing purposes.

100 IN SR	OFC_STATE_ABBR COMPONENT NAME	114 COMPONENT NUMBER	
MANDATORY No	KEY Yes	DATA TYPE Char	
PICTURE X(2)	LARGEST OR LONGEST VALUE	. WY	

Data Values - A two-character postal code identifying the State in which the office is located.

General Description - Postal codes are alphabetic State abbreviations recognized by the U.S. Postal Service as part of a mailing address. OFC STATE ABBR should be valued only if the office is located within the United States or one of its territories. If the office is outside the United States, this component is not valued.

100	OFC_ZIP	115
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X(5)	LARGEST OR LONGEST VALUE	999999999

Data Values - This component contains a five-digit number which is the U.S. Postal ZIP code for the address of the organization or a code up to 10 characters in length to define the foreign (non-USA) postal code of the organization.

General Description - The ZIP Code is a five-digit geographic code that identifies areas within the United States and its possessions for purposes of simplifying the distribution of mail by the U.S. Postal Service. The ZIP Code alinements do not necessarily adhere to boundaries of cities, counties, States, or other jurisdictions. For organizations outside the United States and its territories, the foreign postal code, if applicable, will be defined in the format of its local usage.

100	OFC_COUNTRY_NAME	116
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X(4)	LARGEST OR LONGEST <b>V</b> ALUI	E 30 characters

Data Values - This component contains the name of the country in which the office is located. If the office is in the United States, the abbreviation "USA" is used. For countries other than the United States, the full name of the country is stored in this component.

General Description - The name of the country applies to the country in which the office is physically located. It is the name that is part of the mailing address on correspondence addressed to the office. It bears no relationship to the data holdings of the office.

	OFC_PHONE	117
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY No DATA T	TYPE Char
PICTURE X(12)	LARGEST OR LONGEST VALUE	999-999-9999

Data Values - This is the telephone number of the office. If the office is within the United States or one of its territories, the number consists of a three-digit area code, followed by a dash, and followed by the seven digits of the local telephone number. A dash appears between the third and fourth digits of the local number. If the office is outside the United States, whatever format is required is the one used to store the correct telephone number.

General Description - This is the telephone number at which the office and its contact can be reached.

100	OFC_DIRECTORY_TYPE	118
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY YES	KEY <u>Yes</u>	DATA TYPE Char
PICTURE X(10)	LARGEST OR LONGEST	VALUE 10 characters

## Data Values

- W Water Data Sources Directory
- R Water-related Data Sources Directory
- Ol Directory of Water Resources Organizations

General Description - OFC DIRECTORY TYPE contains a combination of 1 to 10 codes, left-justified, to be used in retrieving specified types of directories. Each code may occur only once in this component. Additional codes will be added by the NAWDEX Program Office, as the need arises, to meet future directory needs.

The alphabetic character 0, not zero, is assigned.

100 IN SR		OFC_AREA COMPONENT NAME	120 COMPONENT NUMBER
MANDATORY	No	KEYNo	DATA TYPE Char
PICTURE	X	LARGEST OR LONGEST VALUE	S S

 $\underline{\text{Data Values}}$  - This component contains a one-character alphabetic code that describes the geographic area encompassed by the data available from the office.

# General Description:

Code	Mea	aning
A	Multicounty -	Two or more counties, all in the same State, but not encompassing the entire State.
С	One County -	All the available data are for a single county.
I	Multicountry,	International - Data from more than one country are available.
M	Multistate (Pro	ovince) - Data from more than one State or Province are available, and all data are for a single country.
N	Nationwide -	The available data span an entire country and are limited to that single country.
S	Statewide -	The available data span an entire State and are limited to that single State (or Province).

100	OFC_REQUESTS	121
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_Yes_	KEY No	DATA TYPE Char
PICTURE X	LARGEST OR LONGEST VALUE	Y or N

Data Values - This component is valued with "Y" if the office responds to requests for data, and with "N" if it does not.

General Description - Offices that collect and(or) store water data may or may not choose to furnish that data to those who request it. If the office does respond to requests for its data, then this component is valued with "Y". This information is furnished to users of NAWDEX so that they can ascertain if the office can be contacted to obtain data.

If the office does not respond to requests for its data, it is still included in the WDSD for administrative purposes, and this component is valued with "N". Frequently offices that do not respond to requests for data furnish their data to one or more organizations that do respond to requests. When this is the case, information about the alternate source of data is contained in schema record number 500.

100	OFC_MEDIA	123
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X	LARGEST OR LONGEST VAI	JUEP

<u>Data Values</u> - This component contains a one-character alphabetic code that describes the type(s) of media used to store the office's hydrologic data.

# General Description:

Code	Meaning
С	Computer recognizable - The data are stored on media that can be read by a computer. This might be punched cards, paper tape, magnetic disk, drum, or some similar device.
D	Computer and published - Data are stored in both computer recognizable and published form.
E	Computer and microform - Data are stored in both computer recognizable and microform formats.
F	Computer, published, and microform - Data are stored in computer recognizable, published, and microform formats.
G	Published and microform - Data are stored in both published and micro-form formats.
M	Microform - Printed data which are stored in reduced size on roll microfilm, microfiche, aperture cards, or some other type of microfilm.
P	Published - The data are available in printed form.

100 IN SR		OFC_LAC_FLAG COMPONENT NAME	124 COMPONENT NUMBER
MAN <b>DATO</b> RY_	No	KEY Yes	DATA TYPE Integer
PICTURE	9	LARGEST OR LONGEST VALU	E 1

Data Values - Valued "1" if the Office is a NAWDEX Assistance Center. Otherwise, it is not valued.

General Description - The purpose of this component is to identify offices that are Assistance Centers for the NAWDEX program. The service capabilities of NAWDEX are supported by a nationwide network of Assistance Centers. These Centers were established in offices of NAWDEX members to provide local and convenient access to NAWDEX and its services. Most are equipped with computer terminals, thereby providing an extensive telecommunications network for access to the computerized directory and indexes being developed for the NAWDEX program. As the NAWDEX membership increases, additional Centers will be added in large population areas and areas of high user interest to provide more optimal access to NAWDEX and its services. A complete directory of Assistance Centers may be obtained from the National Water Data Exchange, U.S. Geological Survey, 421 National Center, Reston, Virginia 22092.

100 IN SR	OFC_LAC COMPONENT NAME	125 COMPONENT NUMBER
MANDATORY N/A	KEY_N/A_	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST VALUE	n /A

 ${\color{red} \underline{Data\ Values}}$  - The schema record contains the telephone numbers and operating hours of Assistance Centers.

125 IN SR	OFC_LAC_HRS COMPONENT NAME	126 COMPONENT NUMBER
MANDATORY Yes	KEY No	DATA TYPE Text
PICTURE X(20)	LARGEST OR LONGEST VALUE	20 characters

<u>Data Values</u> - The hours of operation of the Assistance Centers are given in the following manner:

As shown on the following table, the first three characters indicate the time zone, standardized to Greenwich Mean Time; the fourth character is a blank.

United States Time Zone	Greenwich Standardization (First Three Characters)	
Atlantic	+04	
Eastern	<b>+0</b> 5	
Central	+06	
Mountain	+07	
Pacific	+08	
Yukon	+09	
Alaska-Hawaii	+10	
Bering	+11	

The following abbreviations are also incorporated: SU for Sunday; M for Monday; T for Tuesday; W for Wednesday; TH for Thursday; F for Friday; S for Saturday.

Thus, the following would be for an office in the Central Time Zone in the U.S.A. which is open from 9 a.m. to 3 p.m. on Monday through Thursday, and 9 a.m. to 2 p.m. on Friday:

General Description - This component contains information about the hours during which someone is available at an Assistance Center to respond to requests for data.

125	OFC_LAC_PHONE	127
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY No	DATA TYPE Char
PICTURE X(12)	LARGEST OR LONGEST VALUE	999-999-9999

Data Values - This is the telephone number of the Assistance Center. If the office is within the United States or one of its territories, the number consists of a three-digit area code, followed by a dash, followed by seven digits of the local telephone number. A dash appears between the third and fourth digits of the local number. If the office is outside the United States, whatever format is required is the one used.

General Description - This is the telephone number at which the Assistance Center can be reached for the purpose of requesting information from NAWDEX. It may differ from the telephone number in component 117, OFC Phone, because OFC PHONE is the number to call to request data and index information from NAWDEX.

100 IN SR	OFC_COMMENTS COMPONENT NAME	150 COMPONENT NUMBER
MANDATORY N/A	KEY N/A	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST VALUE_	N/A

Data Values - General Information, in textual form, about an office and its data holdings.

150 IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY No	DATA TYPE Text
PICTURE X(20)	LARGEST OR LONGEST VALUE	40 characters

Data Values - Contains textual comments about the office and its data holdings in a textual format.

General Description - The purpose of this component is to provide a means of storing general information about an office and its data holdings. The information may include anything that would potentially be of interest to a user of NAWDEX.

150		OFC_CMNT_SEQ	152
IN SR		COMPONENT NAME	COMPONENT NUMBER
MANDATORY_	Yes	KEYNo	DATA TYPE Integer
PICTURE	99	LARGEST OR LONGEST VALUE	E <b>9</b> 9

<u>Data Values</u> - A two-digit number that identifies a comment. The first digit is the sequence number of the comment. The second digit is the sequence number of an individual line of the comment.

General Description - The comment sequence number has two purposes. One is to distinguish among separate comments. Up to nine comments can be present under any office, and the first digit of the comment sequence number will be valued from one to nine. The second purpose of the sequence number is to permit segmenting long comments into lines of up to 40 characters per line. Each line is numbered from zero to nine so that if a comment has several lines, they will be printed in correct order when sorted by the sequence number in ascending order.

Therefore, the first line of the first comment is numbered "10," the second line is numbered "11," etc. The first line of the second comment is "20."

100 IN SR	OFFICE_STORED_DATA COMPONENT NAME	200 COMPONENT NUMBER
MANDATORY N/A	KEY_N/A_	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST VALUE_	N/A
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Data Values - Information about the geographic area covered by the data available from the office.

200	OFC_NON_US_COUNTRY	201
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY <u>Yes</u>	DATA TYPE Char
PICTURE X(2)	LARGEST OR LONGEST VALUE	2 characters

Data Values - This component contains a two-character alphabetic FIPS country code, if, and only if, the office has data for sites physically located outside the United States; if the office's data is for sites within the United States, the component will not be valued. Commonly used values are:

MX = Mexico

RP = Republic of the Phillipine Islands

CA = Canada

A complete list of country codes is contained in the Federal Information Processing Standards (FIPS) Publication 10-2, dated 1976, entitled "Countries, Dependencies, and Areas of Special Sovereignty."

General Description - The non-United States country code is valued for only those offices that have data from sites that lie outside of the borders of the United States and its outlying areas. It bears no relationship to the location of the office.

200	OFC_STATE	202
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY Yes	DATA TYPE Integer
PICTURE 9(3)	LARGEST OR LONGEST VALUE	99

Data Values - This component contains a two-digit numeric code representing the State for which the office has data. Numeric codes for foreign installations will also appear, when applicable, as follows:

- 80 = Mexico
  - 81 = Tamaulipas
  - 82 = Nuevo Leon
  - 83 = Coahuila
  - 84 = Chihuahua
  - 85 = Sonora
  - 86 = Baja California Norte
- 87 = Canada
  - 90 = New Brunswick
  - 91 = Quebec
  - 92 = Ontario
  - 93 = Manitoba
  - 94 = Saskatchewan
  - 95 = Alberta
  - 96 = British Columbia
  - 97 = Yukon

99 = U.S. Foreign Installations - Miscellaneous

General Description - State codes are contained in the Federal Information Processing Standards (FIPS) Publication 5-1, dated June 15, 1970, entitled "States and Outlying Areas of the United States," and temporary codes are assigned by NAWDEX to identify foreign installations. The State code represents the location of a data collection site for which the office has data, not the location of the office itself.

200	OFFICE_DATA_DIRECTORY_TYPE	218	
IN SR	COMPONENT NAME	COMPONENT NUMBER	
MANDATORY_Yes	KEY_Yes_	DATA TYPE Char	
PICTURE X(10)	LARGEST OR LONGEST VAL	UE 10 characters	

### Data Values

- W Water Data Sources Directory
- R Water-related Data Sources Directory
- 0<sup>1</sup> Directory of Water Resources Organizations

General Description - OFFICE DATA DIRECTORY TYPE contains a combination of 1 to 10 codes, left-justified, to be used in retrieving specified types of directories. Each code may occur only once in this component. Additional codes will be added by the NAWDEX Program Office, as the need arises, to meet future directory needs.

The alphabetic character 0, not zero, is assigned.

200	OFC_COUNTIES	275
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY N/A	KEY <u>N/A</u>	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST VALUE	n/A

Data Values - Information about the counties for which the office has data.

275		OFC_COUNTY		276
IN SR		COMPONENT NAME	COMPON	ENT NUMBER
MANDATORY	Yes	KEY_Yes	DATA TYPE_	Integer
PICTURE	9(3)	LARGEST OR LONGEST VALUE	840	

<u>Data Values</u> - This component contains a three-digit numeric county code for a county for which the office has data. For data from sites outside the United States, this component is not valued.

General Description - This component is valued with a code representing a county in which a data collection site exists, for which the office holds data. The county must be in the State whose code is in component C202, OFC\_STATE. County codes are contained in the Federal Information Processing Standards (FIPS) Publication 6-3, dated December 15, 1979, entitled "Counties and County Equivalents of the States of the United States and the District of Columbia."

Note: Codes used to value this component include independent city codes for the States of Maryland, Missouri, Nevada, and Virginia; division codes for the State of Alaska; and county equivalents of Puerto Rico and the Virgin Islands.

0	ORGANIZATION_STORED_DATA	400
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY N/A	KEY <u>N</u> /A	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST VALUE	N/A
<u> Data Values</u> - Informat	ion about the number and types	of sites operated by the

1e organization.

400	NON_US_COUNTRY	401
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYYes	DATA TYPE Char
PICTURE X(2)	LARGEST OR LONGEST VALUE	2 characters

Data Values - This component contains a two-character alphabetic country code, if and only if, the organization operates data collection sites physically located outside the United States. If the organization's data collection sites are within the United States, the component is not valued. Commonly used values are:

MX = Mexico

RP = Republic of the Phillipine Islands

CA = Canada

A complete list of country codes is contained in the Federal Information Processing Standards (FIPS) Publication 10-2, dated 1976, entitled "Countries, Dependencies, and Areas of Special Sovereignty."

General Description - The non-United States country code is valued for only those organizations that operate data collection sites that lie outside of the borders of the United States and its outlying areas. It bears no relationship to the location of the organization.

400	STATE	402
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY Yes	DATA TYPE Integer
PICTURE 9(3)	LARGEST OR LONGEST VALUE	99

Data Values - This component contains a two-digit numeric code representing the State in which the organization operates data collection sites. Numeric codes for foreign countries will also appear, when applicable, as follows:

- 80 = Mexico
  - 81 = Tamaulipas
  - 82 = Nuevo Leon
  - 83 = Coahuila
  - 84 = Chihuahua
  - 85 = Sonora
  - 86 = Baja California Norte
- 87 = Canada
  - 90 = New Brunswick
  - 91 = Quebec
  - 92 = Ontario
  - 93 = Manitoba
  - 94 = Saskatchewan
  - 95 = Alberta
  - 96 = British Columbia
  - 97 = Yukon

#### 99 = U.S. Foreign Installations - Miscellaneous

A complete list of State codes is contained in the Federal Information Processing Standards (FIPS) Publication 5-1, dated June 15, 1970, entitled "States and Outlying Areas of the United States."

General Description - The STATE component is valued for those States in which there are sites for which the organization has data. It bears no relationship to the location of the organization.

400	SW_QLTY	403
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY Yes	DATA TYPE Integer
<del></del>	The state of the s	
PICTURE 9(7)	LARGEST OR LONGEST VALUE	9,999,999

Data Values - This is the total number of surface-water-quality sites, located in the State identified by component 402 or the country identified by component 401, which the organization operates.

General Description - The total includes surface-water sites at which one or more water-quality parameters are, or have been, collected. It includes both active and inactive sites and it makes no difference whether or not the data are supplied by the organization upon request. Sites included in the total are only those that are operated by the organization in the State identified by component 402 or the country identified by component 401. Water-quality parameters include physical, chemical, sediment, or biological characteristics of water.

400	SW_QNTY	404
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY Yes	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST VALUE	9,999,999

Data Values - This is the total number of surface-water-quantity sites, located in the State identified by component 402 or the country identified by component 401, which the organization operates.

General Description - The total includes surface-water sites at which one or more water-quantity parameters are, or have been, collected. It includes both active and inactive sites and it makes no difference whether or not the data are supplied by the organization upon request. Sites included in the total are only those that are operated by the organization in the State identified by component 402 or the country identified by component 401. Surface-water-quantity parameters include such items as streamflow, peak flow, low flow, peak stage, low stage, reservoir content, and change in reservoir content.

400 IN SR	GW_QLTY COMPONENT NAME	405 COMPONENT NUMBER
MANDATORY No	KEY Yes	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST VALUE	9,999,999

<u>Data Values</u> - This is the total number of ground-water-quality sites, located in the State identified by component 402 or the country identified by component 401, which the organization operates.

General Description - The total includes ground-water sites at which one or more water quality parameters are, or have been, collected. It includes both active and inactive sites and it makes no difference whether or not the data are supplied by the organization upon request. Sites included in the total are only those that are operated by the organization in the State identified by component 402 or the country identified by component 401. Water quality parameters include physical, chemical, or biological characteristics of water.

400	GW_LVL	406
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY_Yes_	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST VALUE_	9,999,999

<u>Data Values</u> - This is the total number of data-monitoring sites the organization operates, at which water-level measurements are made in the State identified by component 402 or the country identified by component 401.

General Description - The total includes ground-water sites at which water level measurements are, or have been, collected. It includes both active and inactive sites and it makes no difference whether or not the data are supplied by the organization upon request. Sites included in the total are only those that are operated by the organization in the State identified by component 402 or the country identified by component 401.

400	GW_PUMP	407
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY_Yes_	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST VALUE	9,999,999

<u>Data Values</u> - This is the total number of data-monitoring sites, at which there is ground-water pumpage, located in the State identified by component 402 or the country identified by component 401, which the organization operates.

General Description - The total includes ground-water sites at which pumpage measurements are, or have been, collected. It includes both active and inactive sites and it makes no difference whether or not the data are supplied by the organization upon request. Sites included in the total are only those that are operated by the organization in the State identified by component 402 or the country identified by component 401.

400	GLGC	408
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY_Yes_	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST VALUE	9,999,999

Data Values - This is the total number of ground-water sites with geologic descriptions available, located in the State identified by component 402 or the country identified by component 401, which the organization operates.

General Description - The total includes ground-water sites for which there is information describing the geology in which the site is located. This includes descriptions of the surficial geology and other information such as stratigraphic or lithologic logs. It includes both active and inactive sites and it makes no difference whether or not the information is supplied by the organization upon request. Sites included in the total are only those that are operated by the organization in the State identified by component 402 or the country identified by component 401.

400	WATER_USE	409
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY NO	KEY YES DATA	TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST VALUE	9,999,999

Data Values - This is the total number of sites or locations at which water-use data are being collected or monitored by the organization in the State identified by component 402 or the country identified by component 401.

General Description - The total includes all sites or locations at which wateruse data are, or have been, collected or monitored. It includes both active and inactive sites or locations and it makes no difference whether or not the data are supplied by the organization upon request. Sites or locations included in the total are only those that are operated by the organization in the State identified by component 402 or the country identified by component 401. Water-use data includes all data and information collected about the use of water, both withdrawals and returns, for agriculture, industry, municipal water supplies, domestic use, energy production and development, mining, and a variety of other purposes.

_400	MET_DATA	410
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY NO	KEY Yes	DATA TYPEInteger
PICTURE 9(7)	LARGEST OR LONGEST VALUE	9,999,999

Data Values - This is the total number of sites at which meteorological data are measured or monitored by the organization in the State identified by component 402 or the country identified in component 401.

General Description - The total includes all sites at which meteorological data are, or have been, collected or monitored. It includes both active and inactive sites and it makes no difference whether or not the data are supplied by the organization upon request. Sites included in the total are only those that are operated by the organization in the State identified by component 402 or the country identified in component 401. Meteorological data include measurements of precipitation, snow accumulations, wind direction and velocity, temperature, relative humidity, and others.

400	DATA_DICTIONARY_TYPE			418
IN SR	COMPONENT NAME		COMI	ONENT NUMBER
MANDATORY Yes	KEY Yes	DATA	TYPE	Char
PICTURE X(10)	LARGEST OR LONGEST VA	LUE	10 Cha	racters

### Data Values

- W Water Data Sources Directory
- R Water-related Data Sources Directory
- 0<sup>1</sup> Directory of Water Resources Organizations

General Description - DATA DIRECTORY TYPE contains a combination of 1 to 10 codes, left-justified, to be used in retrieving specified types of directories. Each code may occur only once in this component. Additional codes will be added by the NAWDEX Program Office, as the need arises, to meet future directory needs.

The alphabetic character 0, not zero, is assigned.

400 IN SR	COUNTIES COMPONENT NAME	COMPON	475 NENT NUMBER
MANDATORY N/A	KEY N/A	DATA TYPE	<b>S</b> R
PICTURE N/A	LARGEST OR LONGEST VALUE	. <u>n/a</u>	<del></del>

 $\underline{\text{Data Values}}$  - Identifies the counties in which the organization operates data collection sites.

475	COUNTY	4/6
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_Yes	KEY Yes	DATA TYPE Integer
PICTURE 9(3)	LARGEST OR LONGEST VALUE	840

Data Values - This component contains a three-digit numeric code for a county in which the organization operates one or more data collection sites. For sites operated outside the United States, there will be no occurrences of the COUNTIES schema record.

General Description - This component is valued for those counties in which there are one or more data collection sites operated by the organization. The counties must be in the State identified in component 402, STATE. A complete list of county codes is contained in the Federal Information Processing Standards (FIPS) Publication 6-3, dated December 15, 1979, entitled "Counties and County Equivalents of the States of the United States and the District of Columbia."

Note: Codes used to value this component include independent city codes for the States of Maryland, Missouri, Nevada, and Virginia; division codes for the State of Alaska; and county equivalent codes for American Samoa, Guam, Puerto Rico, and the Virgin Islands.

0		OTHER_SOURCE	500
IN SR		COMPONENT NAME	COMPONENT NUMBER
MANDATORY_	N/A	KEY_N/A_	DATA TYPE SR
PICTURE_	N/A	LARGEST OR LONGEST VALUE	n/A

<u>Data Values</u> - Information about other sources of the organization's data. If another organization stores, in part or in whole, data available from the organization named in component ORG NAME, and will respond to requests for the data, that organization is an "other source."

500		OT_SRC_ALT /PRF	501
IN SR		COMPONENT NAME	COMPONENT NUMBER
MANDA TORY_	Yes	KEY No	DATA TYPE Char
PICTURE	X	LARGEST OR LONGEST VALU	E Aor P

Data Values - Contains either an "A" or a "P" depending upon whether the organization is an alternate source or a preferred source, respectively.

General Description - A distinction is made between an alternate source, an "other source" which can be contacted instead of the organization that collected the data, and a preferred data source, an "other source" which should be contacted instead of the collector organization. A collector organization that does not have the capability to respond to requests for data may designate another organization as a preferred source. If the collector organization will respond to requests for its data, and its data is also available from another organization, that other organization may be designated as an alternate source.

All data stored by the collector organization may not be available from the "other source" organization. Component 522, OT\_SRC\_DATA, tells what kinds of data are available from the "other source" organization, and any further qualifications can be explained in comment form in component 551, OT SRC CMNT.

500	OT_SRC_AGCY	502
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY Yes	DATA TYPE Char
PICTURE X(5)	LARGEST OR LONGEST VALUE	5 characters

Data Values - This is the NAWDEX agency code for the "other source" The NAWDEX agency code varies in length from three to five characters. For Federal organizations it is US followed by a two- or three-character meaningful abbreviation of the organization name. Values for non-Federal organizations whose activities are contained within a given State boundary will have a two-character alphabetic State code followed by a NAWDEX sequence number. Values for non-Federal organizations activities at the multistate or national level have a three- to fivecharacter meaningful abbreviation of the organization name (the characters US will not appear in the first two character positions). Alphabetic State codes contained in the Federal Information Processing Standards Publication 5-1, dated June 15, 1970, entitled "States and Outlying Areas of the United States." NAWDEX agency codes are presented in the publication entitled "Identification Codes for Organizations Listed in Computerized Data Systems of the U.S. Geological Survey," which may be obtained from the National Water Data Exchange, U.S. Geological Survey, 421 National Center, Reston, Virginia 22092.

General Description - The NAWDEX agency code is assigned by the NAWDEX Program Office and is the unique identifier for the participating Federal and non-Federal organizations that actively collect and store water data. Non-Federal organizations include State, county, and municipal agencies, as well as intergovernmental compacts, private organizations, universities, and any local organizations at other than county or municipal level.

500	OT_SRC_NAME	510
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY No	DATA TYPE Char
PICTURE X(23)	LARGEST OR LONGEST VALUE	40 characters
Data Values - The name of the	organization may contain u	to 40 characters.

General Description - This is the official name of the organization.

500 IN SR	OT_SRC_CONTACT COMPONENT NAME	511 COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X(15)	LARGEST OR LONGEST VALUE	40 characters

Data Values - This component may contain up to 40 characters.

General Description - The contact is the name, or title, of the person, or organization, that should be contacted by a requester for the purpose of obtaining the organization's data that are indexed in NAWDEX.

500 IN SR	OT_SRC_ST /POB COMPONENT NAME	512 COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X(15)	LARGEST OR LONGEST VALUE	40 characters

Data Values - This component may contain up to 40 characters.

General Description - This is the street address or post office box number of the contact named in component 511, OT SRC CONTACT. It is the address to which a requester should send a letter asking for the organization's data indexed in NAWDEX.

500	OT_SRC_CITY	513
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
	•	
PICTURE X(10)	LARGEST OR LONGEST VALUE	30 characters

Data Values - The name of a city, not to exceed 30 characters.

General Description - The city in which the organization is located. The city name accompanies the address (component 512) and, therefore, should be the name of the city as it is used for mailing purposes.

IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE XX	LARGEST OR LONGEST VALUE	WY

<u>Data Values</u> - A two-character postal code identifying the State in which the organization is located.

General Description - Postal codes are alphabetic State abbreviations recognized by the U.S. Postal Service as part of a mailing address. OT SRC STATE ABBR should be valued only if the organization is located within the United States or one of its territories. If the organization is outside the United States, this component is not valued.

500	OT_SRC_ZIP	515
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X(5)	LARGEST OR LONGEST VALUE	999999999

Data Values - This component contains a five-digit number which is the U.S. Postal ZIP code for the address of the organization or a code up to 10 characters in length to define the foreign (non-USA) postal code of the organization.

General Description - ZIP Code is a five-digit geographic code that identifies areas within the United States and its possessions for purposes of simplifying the distribution of mail by the U.S. Postal Service. The ZIP Code alinements do not necessarily adhere to boundaries of cities, counties, States, or other jurisdictions. For organizations outside the United States and its territories, the foreign postal code, if applicable, will be defined in the format of its local usage.

500	OT_SRC_COUNTRY_NAME	516
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X(4)	LARGEST OR LONGEST VALUE	30 characters

<u>Data Values</u> - This component contains the name of the country in which the organization is located. If the organization is in the United States, the abbreviation "USA" is used. For non-United-States countries, the full name of the country is stored in this component.

General Description - The name of the country applies to the country in which the organization is physically located. It is the name that would be part of a mailing address on correspondence addressed to the organization. It bears no relationship to the data holdings of the organization.

500	OT_SRC_PHONE			517
IN SR	COMPONENT NAME		CON	IPONENT NUMBER
MANDATORY No	KEY_No_	DATA	TYPE	Char
PICTURE X(12)	LARGEST OR LONGEST	VALUE	999-9	999-9999

Data Values - This is the telephone number of the contact named in component 511, OT SRC CONTACT. If the office is within the United States or one of its territories, the number consists of a three-digit area code, followed by a dash, and followed by the seven digits of the local telephone number. A dash appears between the third and fourth digits of the local number. If the office is outside the United States, whatever format is required is the one used to store the correct telephone number.

General Description - This is the telephone number at which the office and its contact can be reached.

_500_	OT_SRC_DIRECTORY_TYPE	218
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY <u>Yes</u>	DATA TYPE Char
PICTURE X(10)	LARGEST OR LONGEST VALU	TE 10 characters

## Data Values

- W Water Data Sources Directory
- R Water-related Data Sources Directory
- 01 Directory of Water Resources Organizations

General Description - OT SRC DIRECTORY TYPE contains a combination of 1 to 10 codes, left-justified, to be used in retrieving specified types of directories. Each code may occur only once in this component. Additional codes will be added by the NAWDEX Program Office, as the need arises, to meet future directory needs.

The alphabetic character 0, not zero, is assigned.

500	OT_SRC_DATA	<b>522</b>
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY No	DATA TYPE Char
PICTURE X(4)	LARGEST OR LONGEST VALU	E 6 characters

<u>Data Values</u> - This component contains one or more alphabetic codes indicating what kinds of data from the collector organization are available from the "other source" organization. From one to six codes can be used.

## General Description:

Code	Meaning
D	Geologic Descriptions - Information describing the geology of the area around data collection sites is available.
G	Ground Water Quality - Water quality data from ground-water sites are available.
L	Ground Water Level - Water-level measurements from ground-water sites are available.
P	Ground Water Pumpage - Pumpage measurements (drawdown, volume) from ground-water sites are available.
Q	Surface Water Quantity - Water-quantity data from surface-water sites are available.
S	Surface Water Quality Stations - Water-quality data from surface-water sites are available.

500		OT_SRC_MEDIA	523
IN SR		COMPONENT NAME	COMPONENT NUMBER
MANDATORY	No	KEYNo	DATA TYPE Char
PICTURE	X	LARGEST OR LONGEST VAL	UE P

<u>Data Values</u> - This component contains a one-character alphabetic code that describes the type(s) of media used to store the organization's hydrologic data.

## General Description:

Code	Meaning
С	Computer recognizable - The data are stored on media that can be read by a computer. This might be punched cards, paper tape, magnetic tape, magnetic disk, drum, or some similar device.
D	Computer and published - Data are stored in both computer recognizable and published form.
E	Computer and microform - Data are stored in both computer recognizable and microform formats.
F	Computer, published, and microform - Data are stored in computer recognizable, published, and microform formats.
G	Published and microform - Data are stored in both published and microform form formats.
M	Microform - Printed data which are stored in reduced size on roll microfilm, microfiche, aperture cards, or some other type of microfilm.
P	Published - The data are available in printed form.

500	OT_SRC_COMMENTS	550
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY N/A	KEYN/A	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST VA	LUEN/A

<u>Data Values</u> - General Information, in textual form, about an "other source" organization and its data holdings.

550	OT_SRC_CMNT	551	
IN SR	COMPONENT NAME	COMPONENT NUMBER	
MANDATORY Yes	KE Y No	DATA TYPE Text	
PICTURE X(20)	LARGEST OR LONGEST	VALUE 40 characters	

Data Values - Contains textual comments about the "other source" organization and its data holdings in a textual format.

General Description - The purpose of this element is to provide a means of storing general information about an "other source" organization and its data holdings. The information may include anything that would potentially be of interest to a user of NAWDEX.

550 IN SR		OT_SRC_CMNT_SEQ COMPONENT NAME	552 COMPONENT NUMBER
MANDATORY_	Yes	KEY No	DATA TYPE Integer
PICTURE	99	LARGEST OR LONGEST	VALUE 99

Data Values - A two-digit number that identifies a comment. The first digit is the sequence number of the comment. The second digit is the sequence number of an individual line of the comment.

General Description - The comment sequence number has two purposes. One is to distinguish among separate comments. Up to nine comments can be present under any "other source" organization, and the first digit of the comment sequence number will be valued from one to nine. The second purpose of the sequence number is to permit segmenting long comments into lines of up to 40 characters per line. Each line is numbered from zero to nine so that if a comment has several lines, they will be printed in ascending order when sorted by the sequence number.

Therefore, the first line of the first comment is numbered "10," the second line is numbered "11," etc. The first line of the second comment is "20."

0		MWDI_LIASON_OFFICIALS	5	10	00	
IN SR		COMPONENT NAME	<del></del>	COMPONE	NT NUMBER	
MANDATORY	N/A	KEY_N/A	DATA	ТҮРЕ	SR	
PICTURE	N/A	LARGEST OR LONGES	T VALUE	n/A		

Data Values - Information about individuals within the organization that should be consulted on water-data aquisition, coordination, and indexing activities. Information may also be provided about individuals that serve as liaison officials in other water-related matters as the need arises.

1000		LIASON_OFC_CODE	1002	
IN SR		COMPONENT NAME	COMPONENT NUMBER	
MANDATORY_	Yes	KEY No	DATA TYPE Char	
PICTURE	X(9)	LARGEST OR LONGEST VALUE	9 characters	

Data Values - The Liaison Office Code is assigned by the NAWDEX Program Office and consists of a 9-character code. The first two characters of the code consists of a two-digit numeric code representing the State or a twocharacter code representing the country in which the office is located; the next five characters consist of a five-digit numeric code representing the city or place in which the office is located; and the next two characters consist of an arbitrary two-digit sequence number to uniquely identify multiple offices within the same city or place. A complete list of country codes is contained in the Federal Information Processing Standards (FIPS) Publication 10-2, dated 1976, entitled "Countries, Dependencies, and Areas of Special Sovereignty"; a complete list of State codes is contained in the Federal Information Processing Standards (FIPS) Publication 5-1, dated 1970, entitled "States and Outlying areas of the United States"; and a complete list of city and place codes is contained in the Federal Information Processing Standards (FIPS) Publication 55, dated 1978, entitled "Codes for Named Populated Places and Related Entities of the States of the United States."

General Description - The Liaison Office Code is assigned by the NAWDEX Office and is used to retrieve addresses of liaison offices from the Water Data Sources Directory data base. The code for an office is unique within an organization but is not necessarily unique across the data bases.

1000	LIASON_OFFICE_TITLE	100 <b>9</b>
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X(15)	LARGEST OR LONGEST VALUE	40 characters

Data Values - This component may contain up to 40 characters.

 $\frac{\text{General Description}}{\text{liaison official resides, the title of the liaison official, or a combination of these, as appropriate.}$ 

1000 IN SR	COMPONENT NAME	1010 COMPONENT NUMBER	
MANDATORY No	KEYNo	DATA TYPE Char	
PICTURE X(15)	LARGEST OR LONGEST VALUE	40 characters	

Data Values - The name of the office may contain up to 40 characters.

General Description - This is the official name of the office within the organization in which the liaison official resides.

1000	LIASONCONTACT	1011
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X(15)	LARGEST OR LONGEST VALUE	40 characters

Data Values - This component may contain up to 40 characters.

General Description - The contact is the name of the person within the organization who should be contacted on matters related to water-data acquisition, coordination, and indexing, or other matters as defined by component 1018, LIAISON DIRECTORY TYPE.

1000	LIASON_ST/POB	1012
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KE Y No	DATA TYPE Char
PICTURE X(15)	LARGEST OR LONGEST V	VALUE 40 characters

Data Values - This component may contain up to 40 characters.

General Description - This is the street address or post office box number of the office of the liaison official.

1000 IN SR	LIASON_CITY COMPONENT NAME	1013 COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Char
PICTURE X(10)	LARGEST OR LONGEST V	VALUE 30 characters

Data Values - The name of a city, not to exceed 30 characters.

General Description - The city in which the liaison office is located. The city name accompanies the address (component 1012) and, therefore, should be the name of the city as it is used for mailing purposes.

1000		LIASON_STATE_ABBR	1014
IN SR		COMPONENT NAME	COMPONENT NUMBER
MANDATORY_	No	KEY Yes	DATA TYPE Char
PICTURE	XX	LARGEST OR LONGEST	VALUE WY

Data Values - A two-character postal code abbreviation that identifies the State in which the liaison office is located.

General Description - Postal codes are alphabetic State abbreviations recognized by the U.S. Postal Service as part of a mailing address. LIASON STATE ABBR should be valued only if the office is located within the United States or one of its territories. If the office is outside the United States, this component is not valued.

1000		LIASON	_Z1P			1015	
IN SR		COMPONENT	NAME			COMPONENT	NUMBER
MANDATORY_	No	KEY NO	<del>_</del>	DATA	TYPE	Char	
PICTURE	X(5)	LARGEST O	R LONGEST	VALUE	99	99999999	

Data Values - This component contains a five-digit number which is the U.S. Postal ZIP code for the address of the office, or a code up to 10 characters in length to define the foreign (non-USA) postal code of the organization.

General Description - The ZIP Code is a five-digit geographic code that identifies areas within the United States and its possessions for purposes of simplifying the distribution of mail by the U.S. Postal Service. The ZIP Code alinements do not necessarily adhere to boundaries of cities, States, or other jurisdictions. For organizations outside the United States and its territories, the foreign postal code, if applicable, will be defined in the format of its local usage.

1000	LIASON_COUNTRY_NAME	1016
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X(4)	LARGEST OR LONGEST V	ALUE 30 characters

• • • •

Data Values - This component contains the name of the country in which the liaison office is located. If the office is in the United States, the abbreviation "USA" is used. For non-United States countries, the full name of the country is stored in this component.

General Description - The name of the country applies to the country in which the office is physically located. It is the name that is part of the mailing address on correspondence addressed to the office.

1000		LIASON_PHONE	_	1017	
IN SR		COMPONENT NAME		COMPONENT	NUMBER
MANDATORY	No	KEYNo	DATA TYPE	Char	
PICTURE	X(12)	LARGEST OR LONGEST VALUE	s 999 <b>–</b> 99	9-9999	

<u>Data Values</u> - This is the telephone number of the liaison office. If the office is within the United States or one of its territories, the number consists of a three-digit area code, followed by a dash, followed by the seven digits of the local telephone number. A dash appears between the third and fourth digits of the local number. If the office is outside the United States, whatever format is required is the one used.

General Description - This is the telephone number at which the liaison official can be reached.

1000	LIASON_DIRECTORY_	TYPE	1018
IN SR	COMPONENT NAME		COMPONENT NUMBER
MANDATORY_Yes_	KEY Yes	DATA TYPE	Char
PICTURE X(10)	LARGEST OR LONGE	ST VALUE 10 ch	naracters

## Data Values

- L Directory of Liaison Officials
- I Directory of Indexing Officials
- N Directory of Water-Use Liaison Officials

General Description - LIAISON DIRECTORY TYPE contains a combination of 1 to 10 codes, left-justified, to be used in retrieving specified types of directories. Each code may occur only once in this component. Additional codes will be added by the NAWDEX Program Office, as the need arises, to meet future directory needs.

1000 IN SR	LIASON_STATES  COMPONENT NAME		1020 COMPONENT	NUMBER
MANDATORY N/A	KEY N/A	DATA	TYPE SR	
PICTURE N/A	LARGEST OR LONGEST	VALUE	N /A	

Data Values - Information about the geographic areas in which the liaison official identified in component 1011, LIASON CONTACT, has jurisdiction.

	LIASON_STATE		1021	
IN SR	COMPONENT NAME		COMPONENT	NUMBER
MANDATORY Yes	KEY Yes	DATA TYPE	Integer	
PICTURE 9(3)	LARGEST OR LONGEST VA	LUE 9	9	

Data Values - This component contains a two-digit numeric code representing a State within which the liaison official identified in component 1011, LIASON\_CONTACT, has jurisdiction.

General Description - State codes are contained in the Federal Information Processing Standards (FIPS) Publication 5-1, dated June 15, 1970, entitled "States and Outlying Areas of the United States."

1020	LIASON_NON_US_COUNTRY			1022	
IN SR	COMPONENT NAME			COMPONENT	NUMBER
MANDATORY No	KEY No	DATA	TYPE	Char	
PICTURE X(2)	LARGEST OR LONGEST V	ALUE 2	Chara	acters	

<u>Data Values</u> - This component contains a two-character code representing a country other than the United States within which the liaison official identified in component 1011, LIASON\_CONTACT, has jurisdiction.

General Description - The liaison non-United States country codes are valued only if the liaison official has jurisdiction outside the United States. Country codes are contained in the Federal Information Processing Standards (FIPS) Publication 10-2, dated 1976, entitled "Countries, Dependencies, and Areas of Special Sovereignty."

1000	LIASON_COMMENTS	1050
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY N/A	KEY_N/A	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST VAL	.UE <u>N/A</u>
Data Values - Generactivities.	ral information, in textual	form, about the liaison

1050	LIASON_CMNT	1051
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY NO DATA TYPE	Text
PICTURE X(20)	LARGEST OR LONGEST VALUE	40 characters

Data Values - Contains textual comments about the liaison office and its data holdings in a textual format.

General Description - The purpose of this component is to provide a means of storing general information about a liaison office and its data holdings. The information may include anything that would potentially be of interest to a user of NAWDEX.

1050 IN SR	LIA	ASON_CMNT_SEQ.		1052 COMPONENT NUMBER
MANDATORY	Yes	KEY_No	DATA TYPE I	nteger
PICTURE	99	LARGEST OR LO	ONGEST VALUE	99

Data Value A two-digit number that identifies a comment. The first digit is the sequence number of the comment. The second digit is the sequence number of an individual line of the comment.

General Description - The comment sequence number has two purposes. One is to distinguish among separate comments. Up to nine comments can be present under any liaison office, and the first digit of the comment sequence number will be valued from one to nine. The second purpose of the sequence number is to permit segmenting long comments into lines of up to 40 characters per line. Each line is numbered from zero to nine so that if a comment has several lines, they will be printed in ascending order when sorted by the sequence number.

Therefore, the first line of the first comment is numbered "10," the second line is numbered "11," etc. The first line of the second comment is "20."

0	MWD1_DATA	1500
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_N/A	KEY N/A	DATA TYPESR
PICTURE N/A	LARGEST OR LONGEST	VALUE N/A

<u>Data Values</u> - Information on the total number of an organization's data collection sites about which data are stored in the Master Water Data Index (MWDI) data base of the National Water Data Exchange (NAWDEX).

1500	MWDI_NON_US_COUNTRY	1501
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_No_	KEY Yes	DATA TYPEChar
PICTURE X (2)	LARGEST OR LONGEST	VALUE 2 characters

Data Values - This component contains a two-character alphabetic country code if the organization has sites in the Master Water Data Index (MWDI) data base that are physically located outside the United States. If the organization's sites are within the United States, this component is not valued. Commonly used values are:

MX = Mexico

RP = Republic of the Phillipine Islands

CA = Canada

A complete list of country codes is contained in the Federal Information Processing Standards (FIPS) Publication 10-2, dated 1976, entitled "Countries, Dependencies, and Areas of Special Sovereignty."

General Description - This component is valued only if the organization operates sites outside the boundaries of the United States and its territories and if one or more of those sites are indexed in the MWDI data base. It bears no relationship to the location of the organization or to the organization's sites outside the United States that are not indexed in the MWDI.

1500	MWDI_STATE	1502
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_Yes	KEY_Yes_	DATA TYPE _Integer
PICTURE 9(3)	LARGEST OR LONGEST VALUE	99

Data Values - This component contains a two-digit numeric code representing a State in which the organization operates sites, as long as one or more of those sites are indexed in the Master Water Data Index. Numeric codes for foreign countries will also appear, when applicable, as follows:

- 80 = Mexico
  - 81 = Tamaulipas
  - 82 = Nuevo Leon
  - 83 = Coahuila
  - 84 = Chihuahua
  - 85 = Sonora
  - 86 = Baja California Norte
- 87 = Canada
  - 90 = New Brunswick
  - 91 = Quebec
  - 92 = Ontario
  - 93 = Manitoba
  - 94 = Saskatchewan
  - 95 = Alberta
  - 96 = British Columbia
  - 97 = Yukon

99 = U.S. Foreign Installations - Miscellaneous

A complete list of State codes is contained in the Federal Information Processing Standards (FIPS) Publication 5-1, dated June 15, 1970, entitled "States and Outlying Areas of the United States."

General Description - The MWDI\_STATE component is valued for those States in which the organization operates sites that are indexed in the Master Water Data Index (MWDI). It bears no relationship to the location of the organization or to the organization's sites that are not indexed in the MWDI.

1500	MWDI_SW_QLTY	1503
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY Yes	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST VA	ALUE 9.999.999

Data Values - This is the total number of surface-water-quality sites operated by the organization that are located in the State identified in component 1502 (or country identified in component 1501) and are indexed in the Master Water Data Index (MWDI). For the same organization and State/country, the value in component 1503 must be less than or equal to the value in component 403.

General Description - The purpose of this component is to provide information on the number of the organization's surface-water-quality sites that are indexed in the MWDI. It should not be confused with component 403, SW QLTY, which is the total number of surface-water-quality sites operated by the organization, regardless of how many of them are indexed in the MWDI. If a site is indexed in the MWDI, detailed information about the site is available, including its name, location, period of record, and frequency of collection of the major surface-water-quality variables at the site.

1500	MWDI_SW_QNTY	1504	
IN SR	COMPONENT NAME	COMPONENT NUMBER	
MANDATORY_No	KEY_Yes_	DATA TYPE Integer	
PICTURE 9(7)	LARGEST OR LONGEST V	7ALUE 9.999.999	

Data Values - This is the total number of surface-water-quantity sites operated by the organization that are located in the State identified in component 1502 (or country identified in component 1501) and are indexed in the Master Water Data Index (MWDI). For the same organization and State/country, the value in component 1504 must be less than or equal to the value in component 404.

General Description - The purpose of this component is to provide information on the number of the organization's surface-water-quantity sites that are indexed in the MWDI. It should not be confused with component 404, SW\_QNTY, which is the total number of surface-water-quantity sites operated by the organization, regardless of how many of them are indexed in the MWDI. If a site is indexed in the MWDI, detailed information about the site is available, including its name, location, period of record, and frequency of collection of the major surface-water-quantity variables at the site.

1500	MWDI_GW_QLTY		1505	
IN SR	COMPONENT NAME		COMPONENT NUMBER	
MANDATORY_No_	KEY <u>Yes</u>	DATA	TYPE Integer	
PICTURE 9(7)	LARGEST OR LONGEST	KEY	9,999,999	

Data Values - This is the total number of ground-water-quality sites operated by the organization that are located in the State identified in component 1502 (or country identified in component 1501) and are indexed in the Master Water Data Index. For the same organization and State/country, the value in component 1505 must be less than or equal to the value in component 405.

General Description - The purpose of this component is to provide information on the number of the organization's ground-water-quality sites that are indexed in the MWDI. It should not be confused with component 405, GW QLTY, which is the total number of ground-water-quality sites operated by the organization, regardless of how many of them are indexed in the MWDI. If a site is indexed in the MWDI, detailed information about the site is available, including its name, location, period of record, and frequency of collection of the major ground-water-quality variables at the site.

1500	MWDI_GW_QLTY	<b>1506</b>
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORYNO	KEY_Yes	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST V	ALUE 9,999,999

Data Values - This is the total number of ground-water-level sites operated by the organization that are located in the State identified in component 1502 (or country identified in component 1501) and are indexed in the Master Water Data Index (MWDI). For the same organization and State/country, the value in component 1506 must be less than or equal to the value in component 406.

General Description - The purpose of this component is to provide information on the organization's ground-water-level sites that are indexed in the MWDI. It should not be confused with component 406, GW\_LVL, which is the total number of ground-water-level sites operated by the organization, regardless of how many of them are indexed in the MWDI. If a site is indexed in the MWDI, detailed information about the site is available, including its name, location, period of record, and frequency of collection of the ground-water levels at the site.

1500	MWDI_GW_PUMP	1507
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY Yes	DATA TYPE Integer
	<del></del>	
PICTURE 9(7)	LARGEST OR LONGEST	<b>VAL</b> UE 9,999,999

Data Values - This is the total number of ground-water-pumpage sites operated by the organization that are located in the State identified in component 1502 (or country identified in component 1501) and indexed in the Master Water Data Index (MWDI). For the same organization and State/country, the value in component 1507 must be less than or equal to the value in component 407.

General Description - The purpose of this component is to provide information on the number of the organization's ground-water-pumpage sites that are indexed in the MWDI. It should not be confused with component 407, GW PUMP, which is the total number of ground-water-pumpage sites operated by the organization, regardless of how many of them are indexed in the MWDI. If a site is indexed in the MWDI, detailed information about the site is available, including its name, location, period of record, and frequency of collection of the ground-water-pumpage data at the site.

1500	MWDI_GLGC	1508
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY <u>Yes</u>	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST VA	ALUE 9.999.999

Data Values - This is the total number of ground-water sites with geologic descriptions available, that are operated by the organization located in the State identified in component 1502 (or country identified in component 1501), and that are indexed in the Master Water Data Index (MWDI). For the same organization and State/country, the value in component 1508 must be less than or equal to the value in component 408.

General Description - The purpose of this component is to provide information on the number of the organization's ground-water sites that are indexed in the MWDI for which there is information describing the geology in which the sites are located. It should not be confused with component 408, GLGC, which is the total number of sites with geologic information operated by the organization, regardless of how many of them are indexed in the MWDI. If a site is indexed in the MWDI, detailed information about the site is available, including its name, location, period of record, and the geologic descriptors for the site.

1500	MWDI_WATER_USE		1509	
IN SR	COMPONENT NAME		COMPONENT	NUMBER
MANDATORY_No_	KEY Yes	DATA	TYPE Integer	
PICTURE 9(7)	LARGEST OR LONGEST	VALUE	9,999,999	

Data Values - Water-use data are not currently indexed in the Master Water Data Index. This component is, therefore, reserved for future use.

1500	MWD1_MET_DATA	1510
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_No	KEY_Yes	DATA TYPE Integer
PICTURE 9(7)	LARGEST OR LONGEST	VALUE 9.999.999

Data Values - This is the total number of meteorological sites operated by the organization that are located in the State identified in component 1502 (or country identified in component 1501) and are indexed in the Master Water Data Index (MWDI). For the same organization and State/country, the value in component 1510 must be less than or equal to the value in component 410.

General Description - The purpose of this component is to provide information on the number of the organization's meteorological sites that are indexed in the MWDI. It should not be confused with component 410, MET DATA, which is the total number of meteorological sites operated by the organization regardless of how many of them are indexed in the MWDI. If a site is indexed in the MWDI, detailed information about the site is available, including its name, location, period of record, and the frequency of collection of the major meteorological variables at the site.

1500	MWDI_DIRECTORY_TYPE	<b>1</b> 51 <b>8</b>
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY_Yes_	KEY_Yes	DATA TYPE Char
PICTURE X(10)	LARGEST OR LONGEST VAL	LUE 10 characters

#### Data Values

W - Water Data Sources Directory

R<sub>1</sub> - Water-related Data Sources Directory O - Directory of Water Resources Organizations

General Description - MWDI\_DIRECTORY\_TYPE contains a combination of 1 to 10 codes, left-justified, to be used in retrieving specified types of directories. Each code may occur only once in this component. Additional codes will be added by the NAWDEX Program Office, as the need arises, to meet future directory needs.

The alphabetic character 0, not zero, is assigned.

1500 IN SR	MWDI_COUNTIES COMPONENT NAME	1575 COMPONENT NUMBER
MANDATORY N/A	KEY_N/A_	DATA TYPE SR
PICTURE N/A	LARGEST OR LONGEST	Value n/A

 $\underline{\text{Data Values}}$  - Identifies the counties in which the organization operates sites that are indexed in the Master Water Data Index.

1575	MWDI_COUNTY	1576
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY Yes	KEY Yes	DATA TYPE Integer
PICTURE 999	LARGEST OR LONGEST VAL	JUE 840

<u>Data Values</u> - This component contains a three-digit numeric code for a county in which the organization operates one or more sites that are indexed in the Master Water Data Index. For sites operated outside the United States, there will be no occurrences of the MWDI COUNTIES schema record.

General Description - This component is valued for those counties in which there are one or more data collection sites operated by the organization, if those sites are indexed in the MWDI. The counties must be in the State identified in component 1502, MWDI\_STATE. A complete list of county codes is contained in the Federal Information Processing Standards (FIPS) publication 6-3, dated December 15, 1979, entitled "Counties and County Equivalents of the States of the United States and the District of Columbia."

Note: Codes used to value this component include independent city codes for the States of Maryland, Missouri, Nevada, and Virginia; division codes for the State of Alaska; and county equivalents of Puerto Rico and the Virgin Islands.

0	WATER_RELATED_DATA	1600	
IN SR	COMPONENT NAME	COMPONENT NUMBER	
MANDATORY N/A	KEY <u>N/A</u>	DATA TYPE SR	
PICTURE N/A	LARGEST OR LONGEST	VALUE N/A	

Data Values - Information about water-related data that are collected and made available by the organization. Examples of water-related data include meteorological, water use, land use, oceanographic, agricultural, demographic, and other types of data. Water-related data are defined as any data having significance to users of water data or to those conducting water-resource projects or investigations.

1600 IN SR	PARAMETER_CODE COMPONENT NAME		1601 COMPONENT NUMBER
MANDATORY No	KEY Yes	DATA	TYPE Char
PICTURE X(8)	LARGEST OR LONGEST VALUE		99999999

<u>Data Values</u> - This component contains an eight-character code which identifies the type of water-related data available.

General Description - The purpose of this component is to identify the individual types of water-related data that may be available from the organization. A different parameter code is assigned to each major category or subcategory of water-related data identified. A complete list of all codes assigned may be obtained from: National Water Data Exchange, U.S. Geological Survey, 421 National Center, Reston, Virginia 22092.

1600	BEGIN_YEAR	1602
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY_No	DATA TYPE Integer
PICTURE 9(4)	LARGEST OR LONGEST V	ALUE Current Year

<u>Data Values</u> - This component contains a four-digit numeric value which identifies the year that the water-related data being reported were first collected by the organization.

General Description This component identifies the calendar year in which the organization first began to collect the water-related data that are being made available.

1600 IN SR	END_YEAR COMPONENT NAME	1603 COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Integer
PICTURE 9(4)	LARGEST OR LONGEST VALUE	Current Year

<u>Data Values</u> - This component contains a four-digit numeric value which identifies the year that data-collection activities for the water-related data being reported were ceased. If the organization is currently collecting the water-related data reported, this component is not valued.

General Description - This component identifies the calendar year in which the organization discontinued collection of the water-related data being reported. If, at a future date, the collection of the water-related data is resumed, the former end date is deleted.

1600		NUMBER_OF_SITES	1604	
IN SR	•	COMPONENT NAME	COMPONENT NUMBER	
MANDATORY_	No	KEY No	DATA TYPE Integer	
PICTURE	9(7)	LARGEST OR LONGES	T <b>V</b> ALUE 9,999,999	

<u>Data Values</u> - This is the total number of sites, if applicable, at which the reported water-related data are, or have been, collected by the organization.

General Description - The purpose of this component is to provide information on the number of sites at which the organization has the reported water-related data available. Some types of water-related data are collected on an areal or nonpoint source basis. In these cases, this component will not be valued.

1600	NUM_OBSERVATIONS	1605
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TYPE Integer
PICTURE 9(8)	LARGEST OR LONGEST V	7ALUE 99,999,999

Data Values - This is the total number of occurrences or observations, if applicable, for which the reported water-related data are, or have been, collected and are available.

General Description - Many types of water-related data are collected on an areal basis and the number-of-sites component (component 1604) is not applicable. The number of occurrences or observations of these data may, then, be reported to indicate the volume of data available to the user.

1600	GEOGRAPHIC_AREA		1606		
IN SR	COMPONENT NAME		COMPONENT NUMBER		
MANDATORY No	KEY No	DATA	TYPE	Char	
PICTURE X(1)	LARGEST OR LONGEST VALUE			S	

<u>Data Values</u> - This component contains a one-character alphabetic code that describes the geographic area encompassed by the water-related data reported and available.

## General Description:

Code	Meaning
A	Multicounty - Two or more counties, all in the same State, but not encompassing the entire State.
С	One County - All the data available are for a single county.
I	Multicountry (International) - Data from more than one country are available.
M	Multistate (Province) - Data from more than one State or Province are available, and all data are for a single country.
N	Nationwide - The available data span an entire country and are limited to that single country.
S	Statewide - The available data span an entire State or Province and are limited to that single State or Province.

1600	OBS_FREQUENCY 1607		
IN SR	COMPONENT NAME		COMPONENT NUMBER
MANDATORY No	KEYNo	DATA TY	PE Char
PICTURE X(1)	LARGEST OR LONGEST VA	LUE	Z

<u>Data Values</u> - This component contains a one-character alphabetic code that best describes the frequency at which the water-related data reported are collected or measured.

# General Description:

Code	Frequency
A	Annual (Once per year)
В	Other periodic (Less than once per year)
С	Continuous, Year-round - Nonrecorder
D	Continuous, Seasonal - Nonrecorder
E	Eliminated Activity - Data are no longer being collected
I	Continuous, Year-round, Recorder used
J	Continuous, Seasonal, Recorder used
M	Monthly, Year-round
N	Monthly, Seasonal
0	Daily, Year-round
P	Daily, Seasonal
Q	Quarterly, Year-round
R	Quarterly, Seasonal
S	Semiannual (Twice per year)
U	Unique (One-time only) measurement
W	Weekly, Year-round
X	Weekly, Seasonal
Y	Seasonal (No time period specified)
Z	Data collected at an irregular or unspecified frequency

1600	STORAGE_MEDIA	1608
IN SR	COMPONENT NAME	COMPONENT NUMBER
MANDATORY No	KEY No	DATA TYPE Char
PICTURE X(1)	LARGEST OR LONGEST V	'ALUE P

<u>Data Values</u> - This component contains a one-character alphabetic code that describes the type(s) of media used to store the water-related data reported.

## General Description:

Code	Meaning
С	Computer recognizable - The data are stored on media that can be read by a computer. This might be punched cards, paper tape, magnetic tape, magnetic disk, drum, or some similar device.
D	Computer and published - Data are stored in both computer recognizable and published form.
E	Computer and microform - Data are stored in both computer recognizable and micoform formats.
F	Computer, published, and microform - Data are stored in computer recognizable, published, and microform formats.
G	Published and microform - Data are stored in both published and microform formats.
M	Microform - Printed data which are stored in reduced size on roll microfilm, microfiche, aperture cards, or some other type of microfilm.
P	Published - The data are available in printed form.

1600 IN SR	OTHR_SOURCE COMPONENT NAME	1610 COMPONENT NUMBER
MANDATORY No	KEY_No	DATA TYPE Char
PICTURE X(5)	LARGEST OR LONGEST VALUE	E 5 characters

<u>Data Values</u> - This is the NAWDEX Agency Code that identifies another organization that is a source of the organization's water-related data.

General Description - A complete description of the NAWDEX Agency Code may be found in this dictionary under component number 1. This is the same code that is also stored in component 502 (OT SRC AGCY). If this component is valued, schema record 500 (OTHR SOURCE) must also be valued.

1600 IN SR	WRD_DIRECTORY_TYPE COMPONENT NAME			1618 COMPONENT NUMBER		
MANDATORY Yes	KEY_Yes	DATA	TYP	'E	Char	
PICTURE X(10)	LARGEST OR LONGEST VALUE		10	char	acters	3

#### Data Values

- W Water Data Sources Directory
- R Water-related Data Sources Directory
  O 1 Directory of Water Resources Organizations
- L Directory of Liaison Officials
- I Directory of Indexing Officials

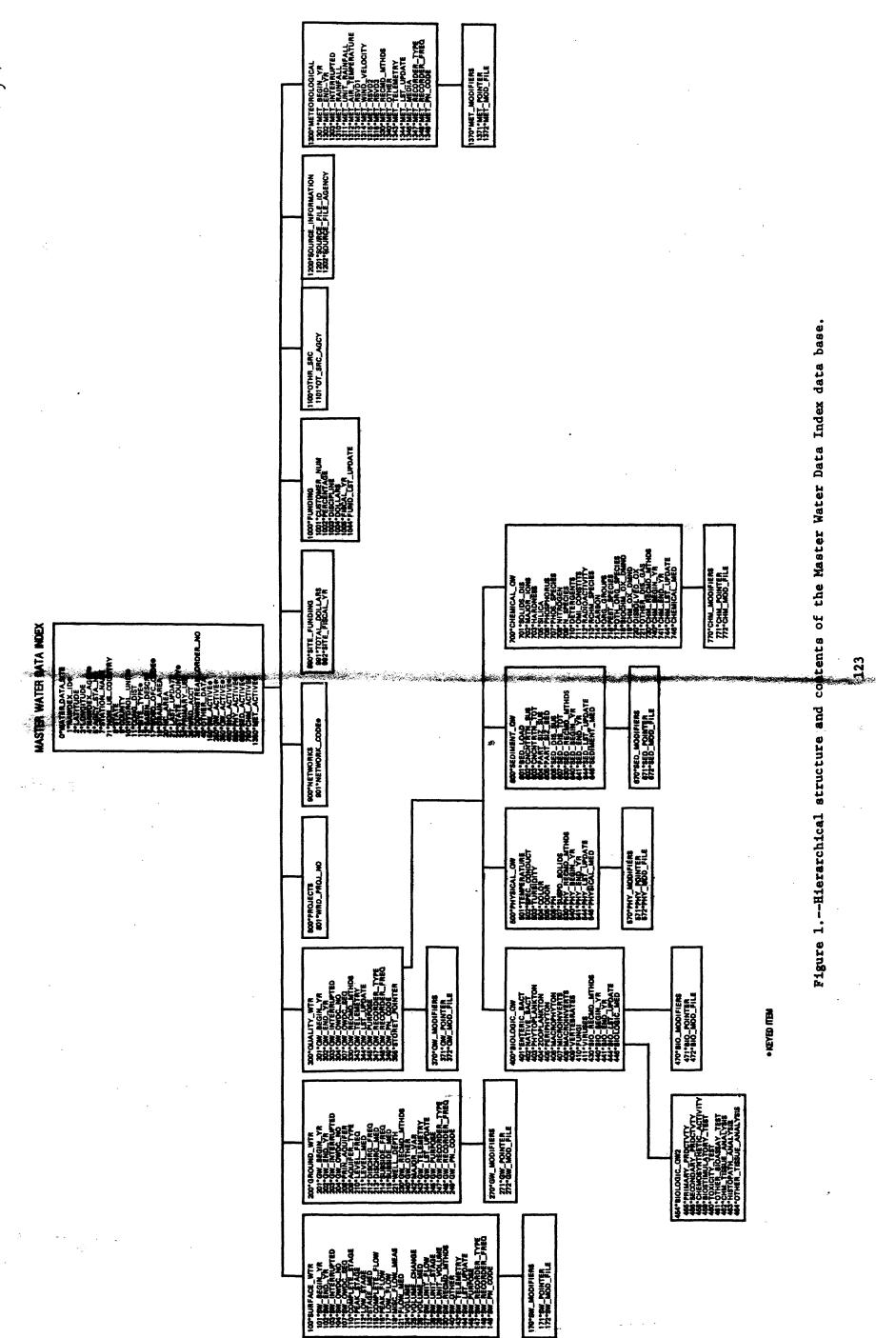
General Description - WRD DIRECTORY TYPE contains a combination of 1 to 10 codes, left-justified, to be used in retrieving specified types of directories. Each code may occur only once in this component. Additional codes will be added by the NAWDEX Program Office, as the need arises, to meet future directory needs.

The alphabetic character 0, not zero, is assigned.

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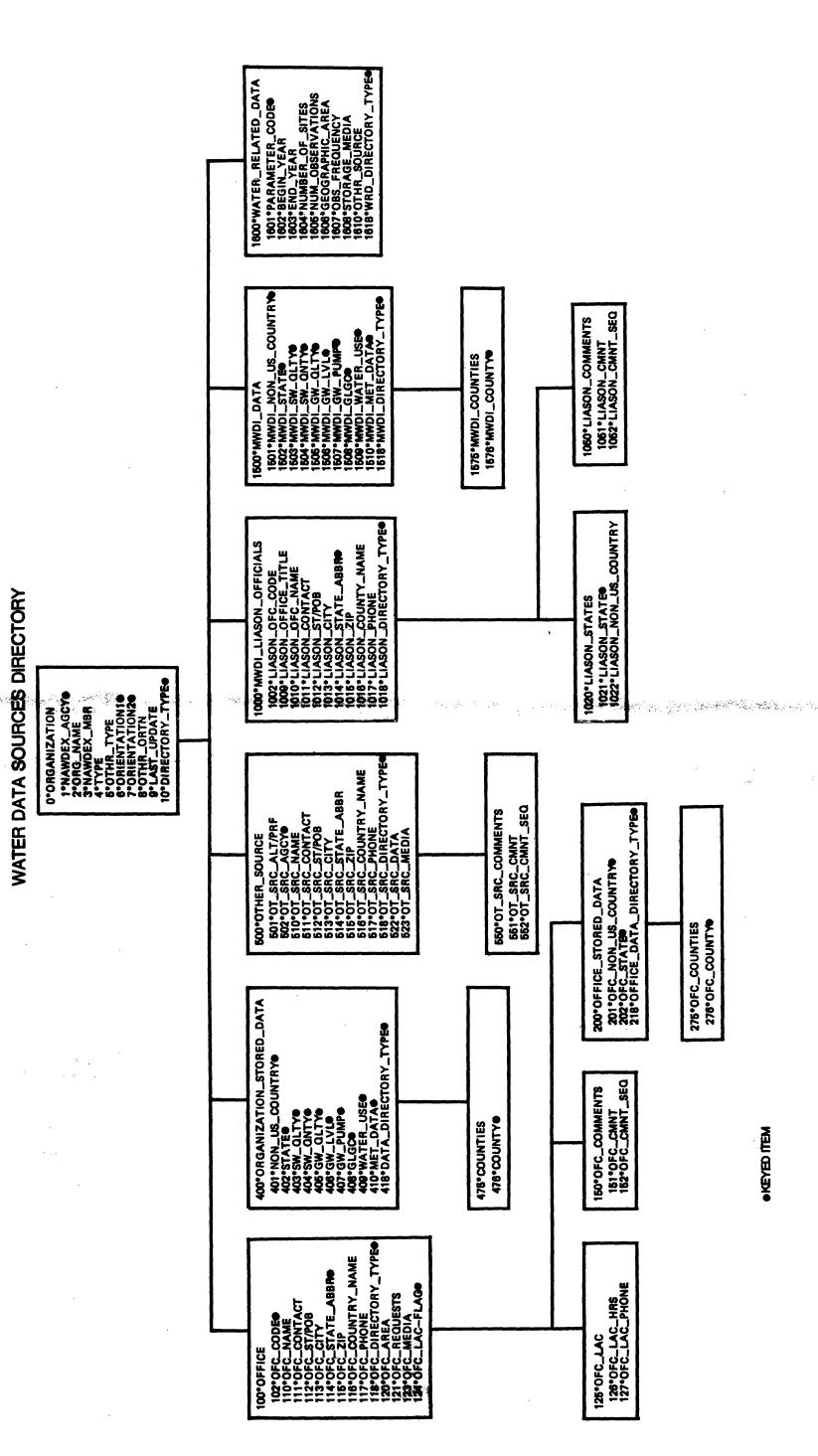


Figure 2. -- Hierarchical structure and contents of the Water Data Sources Directory data base.